

0280

#2

OIPE

RAW SEQUENCE LISTING

DATE: 12/14/2001

PATENT APPLICATION: US/10/006,780

TIME: 11:08:09

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12142001\I006780.raw

ENTERED

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4 <110> APPLICANT: Sakowicz, Roman
5      Beraud, Christophe
6      Guo, Jun
7      Freedman, Richard
9 <120> TITLE OF INVENTION: NOVEL MOTOR PROTEIN OF P. FALCIPARUM AND
10     METHODS FOR ITS USE
13 <130> FILE REFERENCE: CYTOP083
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/006,780
C--> 15 <141> CURRENT FILING DATE: 2001-11-30
15 <160> NUMBER OF SEQ ID NOS: 10
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 3931
21 <212> TYPE: DNA
22 <213> ORGANISM: Plasmodium falciparum
24 <400> SEQUENCE: 1
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26 tggtagaggaa gagaccactg agcgaattag aaaagaagaa aaaagatagt gatataatta 120
27 cagtaaaaaa caattgtacg ctttatatag atgaaccaag atataaagtg gatatgacaa 180
28 aatatataga aaggcatgaa tttattgtag ataaaagttt tgatgatacg gttgataatt 240
29 tcacagtata tgagaatacc ataaaacccat taataataga tttatatgag aatggttgtg 300
30 tatgttcttg ttttgcttat gggcaaacag gtagcgggaa gacttatacg atggttaggt 360
31 cacaaccgta tggacagagt gatacccctg gtatatattca atacgcagca ggggatatat 420
32 ttaccttttt aaatatattat gataaagata atacgaaagg gatattttata tcattttatg 480
33 aaattttatt tggtaaatta tatgatttat tacaataacg taagatggta gcagcattag 540
34 aaaatgggaa aaaagaagtt gtagtaaaag atttaaaaaa attaagagta ttaacaaaag 600
35 aagaattaat attaaaaatg atagatgggtg ttttattaag aaaaattggt gtttaattcac 660
36 aaaacgatga atcatctaga tcacatgcta tattaaatat tgatttataaa gatataaata 720
37 aaaatacatc tcttggaataa attgctttca ttgatttagc aggaagtgaag agaggagctg 780
38 ataccgtttc acaaaaataaa caaacacaaa ccgatggagc taatattaat agatctttac 840
39 tagccttaaa ggaatgtatt cgagctatgg attcagataa aaatcatata cctttcagag 900
40 attcagaatt aactaaagtt ttaagagata tattttagag gaaatctaaa agtattatga 960
41 tagctaatat ttctcctaca attagttggt gtgagcaaac attgaataga ttaagatatt 1020
42 cttcaagagt taagaacttt aaaaataaat ctacatgtat aaatgaagaa gatgatacaa 1080
43 ataccgaaag aattagtata ttagattcaa agggaagtga aatgaatgca tctagtatag 1140
44 aaaatgtagt tatcaaatca atcatcttc tttcaaataa taataataat aaaatcaatc 1200
45 gtggcaaaat taatgataag atagaagaa ataatatctt aaaaaataaa tcttttgata 1260
46 aacctaggga aggattcaca tcaacctttg gaaaatacag ttcacttaat gatatagaca 1320
47 aaataaagaa aaataagaaa aagggtttta ttaattataa aagtacatta tataatgaca 1380
48 acaccataaa taaaaagcac aacaataata ataataataa taatgataat aatgataata 1440
49 ataataataa taataataat aataataatg atagtagtag tatggtcaat aacatgatca 1500
50 atcatatgat caataataat attaacaaca atatcaatgt aaataacaac aataataata 1560
51 ataataataa caataatagt cataataatc atctaccaca acccaactat gcattttaccg 1620
52 atacatccga tttttcttcg cttgacgata tgaactgtca tttaaacaat aacgacaaaa 1680
53 gtatttttct acacaaaaaa aatttaagag acaacattaa attgaaaaac agaagtagtt 1740
54 gtgataacat tatgaacaag aagaaaaaca atcttcattt agctagacat agtgtcggaa 1800
55 gtaaatatac aatgttttca tatgaccac aaaaaataa ggataataga ttttttaaaa 1860

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56 gtaatataaa caaaatggaa gataatacac ctaaggatat actatatgag tctaggaatg 1920
57 tatcgaatat gaatggtaat gttttattag ggtaaacaac gaatactcat cacgatatct 1980
58 cgacaaagga tgaaaatcat aatgataata aaataaacaac tgggtgttatt aacattataa 2040
59 ataatagtaa tgtgaatagt ataaataata gtaatatgaa tagtataaat aatagtaata 2100
60 tgaatagcaa tagtatttat aaaagtaact ataatagtaa tcagtccata tcagatgttc 2160
61 aaattagata cgtgaacgaa atggacacta gcaataaaaa taatgacaac atattttttg 2220
62 atgctatatc atgtgataat aacatgtatc ctaatataac aaataataat aataataata 2280
63 ataataataa taataataat aataacaata ttgatgtgga gaattataat aatcgtgatg 2340
64 gtacaaataa ctctatgaag ttgtatgctt ataatagtca taacttattt caacctgata 2400
65 ataataaaaa tacatcaaac attcagaata taaatacaaa taaaaataat caagatggga 2460
66 atgtaaatga ttcaatgaat ttttgccatt ataattttaa tgataaaaaat tttttgatag 2520
67 atttaataaa taaggaaaca aaggataaaa acatacatgg atgtgacaat aatattattc 2580
68 aaaataggaa cgattttgaa aaaaagaaaa aaaccaattt ttacaataat aataatattg 2640
69 ttatagtaaa taataatatg ggaaataaca atagtccccg tatgaaatat ggtttatgtg 2700
70 gtagtcatat aagtattgat aatatgaaaa ataatgaaat gaaaaataat gaaatgaaag 2760
71 ataatgaaat gaaagataat catataaaaa gtaacaataa taatagtagt agtagtagta 2820
72 gtagtaataa taatatttat aataatatta atgatgatga tacatttcaa aatgattatt 2880
73 gtcacaatga taataccttt actatttagac gaaaaaacaac tactaatata aatagtaaca 2940
74 tataccaaaa tgatgatata atttatacaa taaatagttt aaatgattat atgagcaata 3000
75 ccctgttaca ttttaaagag aaatatacat atccaacact aagcacaaat gaagatatat 3060
76 ataataaaga aatggaagga aaacatataa ggctggatga tcaagataaa tatgatgata 3120
77 atgataataa taatgttgat aataataata aaaataatgt tgataataat gttgataata 3180
78 ataatgttga taataatgtt gataataatg ataaaaataa tgttgataat aataatgttg 3240
79 ataatgatga tgatgatgta gattttcata atataaaaaa ttttaataat aatgaatatt 3300
80 ttagctactt tcaaaaaaat gtagatacaa taataaataa ttgcttaaat tcttttagata 3360
81 tttctagtat gtatgatgat acaaaaagaga tactaaataa tctctatta tctaaatata 3420
82 aagctgaaaa agataatgtt ataaaaaaat atattaatga agatataaaa aatatgtctt 3480
83 tagaagaaat cgataaaaca gctcagtcga tttatgaaaa gagaaaagta ttacttacaa 3540
84 aattattatt attattttaa aaaaatgtag atacacaaat aaataatgaa acaagtgtt 3600
85 taagaaaaga tcttgattatg tgtcacatat gtaataataa tcctgatgat caatttcatt 3660
86 tttatgcata tagtagacta gaaaaagata ttattaattt aattatgtta agacaaatat 3720
87 ggtgtgagag tgaaaactta agactcttat atcaattctt agtagtagaa tatcaaaata 3780
88 aatcagcaaa ttctgtttta ttaaatgtct cttcaaataa tggtgacatt atattactta 3840
89 ataaaaaatt ggttcaagat aacatcaaaa attctatgga ccacaacaat atacacaaaa 3900
90 aataaagaat attaataata ataagtaaat a
3931

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92 <210> SEQ ID NO: 2

93 <211> LENGTH: 1288

94 <212> TYPE: PRT

95 <213> ORGANISM: Plasmodium falciparum

97 <400> SEQUENCE: 2

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98 Met Asn Ser Lys Ile Lys Val Val Val Arg Lys Arg Pro Leu Ser Glu
99 1 5 10 15
100 Leu Glu Lys Lys Lys Lys Asp Ser Asp Ile Ile Thr Val Lys Asn Asn
101 20 25 30
102 Cys Thr Leu Tyr Ile Asp Glu Pro Arg Tyr Lys Val Asp Met Thr Lys
103 35 40 45
104 Tyr Ile Glu Arg His Glu Phe Ile Val Asp Lys Val Phe Asp Asp Thr
105 50 55 60
106 Val Asp Asn Phe Thr Val Tyr Glu Asn Thr Ile Lys Pro Leu Ile Ile

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107 65          70          75          80
108 Asp Leu Tyr Glu Asn Gly Cys Val Cys Ser Cys Phe Ala Tyr Gly Gln
109          85          90          95
110 Thr Gly Ser Gly Lys Thr Tyr Thr Met Leu Gly Ser Gln Pro Tyr Gly
111          100          105          110
112 Gln Ser Asp Thr Pro Gly Ile Phe Gln Tyr Ala Ala Gly Asp Ile Phe
113          115          120          125
114 Thr Phe Leu Asn Ile Tyr Asp Lys Asp Asn Thr Lys Gly Ile Phe Ile
115          130          135          140
116 Ser Phe Tyr Glu Ile Tyr Cys Gly Lys Leu Tyr Asp Leu Leu Gln Lys
117 145          150          155          160
118 Arg Lys Met Val Ala Leu Glu Asn Gly Lys Lys Glu Val Val Val
119          165          170          175
120 Lys Asp Leu Lys Ile Leu Arg Val Leu Thr Lys Glu Glu Leu Ile Leu
121          180          185          190
122 Lys Met Ile Asp Gly Val Leu Leu Arg Lys Ile Gly Val Asn Ser Gln
123          195          200          205
124 Asn Asp Glu Ser Ser Arg Ser His Ala Ile Leu Asn Ile Asp Leu Lys
125          210          215          220
126 Asp Ile Asn Lys Asn Thr Ser Leu Gly Lys Ile Ala Phe Ile Asp Leu
127 225          230          235          240
128 Ala Gly Ser Glu Arg Gly Ala Asp Thr Val Ser Gln Asn Lys Gln Thr
129          245          250          255
130 Gln Thr Asp Gly Ala Asn Ile Asn Arg Ser Leu Leu Ala Leu Lys Glu
131          260          265          270
132 Cys Ile Arg Ala Met Asp Ser Asp Lys Asn His Ile Pro Phe Arg Asp
133          275          280          285
134 Ser Glu Leu Thr Lys Val Leu Arg Asp Ile Phe Val Gly Lys Ser Lys
135          290          295          300
136 Ser Ile Met Ile Ala Asn Ile Ser Pro Thr Ile Ser Cys Cys Glu Gln
137 305          310          315          320
138 Thr Leu Asn Thr Leu Arg Tyr Ser Ser Arg Val Lys Asn Phe Lys Asn
139          325          330          335
140 Lys Ser Thr Cys Ile Asn Glu Glu Asp Asp Thr Asn Thr Glu Arg Ile
141          340          345          350
142 Ser Ile Leu Asp Ser Lys Gly Ser Glu Met Asn Ala Ser Ser Ile Glu
143          355          360          365
144 Asn Val Val Ile Lys Ser Asn His Leu Leu Ser Asn Asn Asn Asn Asn
145          370          375          380
146 Lys Ile Asn Arg Gly Lys Ile Asn Asp Lys Ile Glu Arg Asn Asn Ile
147 385          390          395          400
148 Leu Lys Asn Lys Ser Phe Asp Lys Pro Arg Glu Gly Phe Thr Ser Thr
149          405          410          415
150 Phe Gly Lys Tyr Ser Ser Leu Asn Asp Ile Asp Lys Ile Lys Lys Asn
151          420          425          430
152 Lys Lys Lys Gly Leu Ile Asn Tyr Lys Ser Thr Leu Tyr Asn Asp Asn
153          435          440          445
154 Thr Ile Asn Lys Lys His Asn Asn Asn Asn Asn Asn Asn Asp Asn
155          450          455          460

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156 Asn Asp Asn Asn Asn Asp Asn Asn Asn Asn Asn Asn Asn Asp Ser Ser
157 465 470 475 480
158 Ser Met Val Asn Asn Met Ile Asn His Met Ile Asn Asn Asn Ile Asn
159 485 490 495
160 Asn Asn Ile Asn Val Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
161 500 505 510
162 Asn Ser His Asn Asn His Leu Pro Gln Pro Asn Tyr Ala Phe Thr Asp
163 515 520 525
164 Thr Ser Asp Phe Ser Ser Leu Asp Asp Met Asn Cys His Leu Asn Asn
165 530 535 540
166 Asn Asp Lys Ser Ile Phe Leu His Lys Lys Asn Leu Arg Asp Asn Ile
167 545 550 555 560
168 Lys Leu Lys Asn Arg Ser Ser Cys Asp Asn Ile Met Asn Lys Lys Lys
169 565 570 575
170 Asn Asn Leu His Leu Ala Arg His Ser Val Gly Ser Lys Leu Thr Met
171 580 585 590
172 Phe Ser Tyr Asp Pro Gln Lys Asn Lys Asp Asn Thr Phe Phe Lys Ser
173 595 600 605
174 Asn Ile Asn Lys Met Glu Asp Asn Thr Pro Lys Asp Ile Leu Tyr Glu
175 610 615 620
176 Ser Arg Asn Val Ser Asn Met Asn Gly Asn Val Leu Leu Gly Leu Asn
177 625 630 635 640
178 Lys Asn Thr His His Asp Ile Ser Thr Lys Asp Glu Asn His Asn Asp
179 645 650 655
180 Asn Lys Ile Asn Asn Gly Val Ile Asn Ile Ile Asn Asn Ser Asn Val
181 660 665 670
182 Asn Ser Ile Asn Asn Ser Asn Met Asn Ser Ile Asn Asn Ser Asn Met
183 675 680 685
184 Asn Ser Asn Ser Ile Tyr Lys Ser Asn Tyr Asn Ser Asn Gln Ser Ile
185 690 695 700
186 Ser Asp Val Gln Ile Arg Tyr Val Asn Glu Met Asp Thr Ser Asn Lys
187 705 710 715 720
188 Asn Asn Asp Asn Ile Phe Phe Asp Ala Ile Ser Cys Asp Asn Asn Met
189 725 730 735
190 Tyr Pro Asn Ile Thr Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn Asn
191 740 745 750
192 Asn Asn Asn Asn Asn Ile Asp Val Glu Asn Tyr Asn Asn Arg Asp Gly
193 755 760 765
194 Thr Asn Asn Ser Met Lys Leu Tyr Ala Tyr Asn Ser His Asn Leu Phe
195 770 775 780
196 Gln Pro Asp Asn Asn Lys Asn Thr Ser Asn Ile Gln Asn Ile Asn Thr
197 785 790 795 800
198 Asn Lys Asn Asn Gln Asp Gly Asn Val Asn Tyr Ser Met Asn Phe Cys
199 805 810 815
200 His Tyr Asn Leu Asn Asp Lys Asn Tyr Leu Ile Asp Leu Asn Asn Lys
201 820 825 830
202 Glu Gln Lys Asp Lys Asn Ile His Gly Cys Asp Asn Asn Ile Ile Gln
203 835 840 845
204 Asn Arg Asn Asp Phe Glu Lys Lys Lys Lys Thr Asn Phe Tyr Asn Asn

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205      850      855      860
206 Asn Asn Ile Val Ile Val Asn Asn Asn Met Gly Asn Asn Asn Ser Pro
207 865      870      875      880
208 Arg Met Lys Tyr Gly Leu Cys Gly Ser His Thr Ser Ile Asp Asn Met
209      885      890      895
210 Lys Asn Asn Glu Met Lys Asn Asn Glu Met Lys Asp Asn Glu Met Lys
211      900      905      910
212 Asp Asn His Ile Lys Ser Asn Asn Asn Asn Ser Ser Ser Ser Ser Ser
213      915      920      925
214 Ser Asn Asn Asn Ile Tyr Asn Asn Ile Asn Asp Asp Asp Thr Phe Gln
215      930      935      940
216 Asn Asp Tyr Cys His Asn Asp Asn Thr Phe Thr Ile Arg Arg Lys Asn
217 945      950      955      960
218 Asn Thr Asn Ile Asn Ser Asn Ile Tyr Gln Asn Asp Asp Ile Ile Tyr
219      965      970      975
220 Thr Ile Asn Ser Leu Asn Asp Tyr Met Ser Asn Thr Leu Leu His Phe
221      980      985      990
222 Lys Glu Lys Tyr Thr Tyr Pro Thr Leu Ser Thr Asn Glu Asp Ile Tyr
223      995      1000      1005
224 Asn Lys Glu Met Glu Gly Lys His Ile Arg Leu Asp Asp Gln Asp Lys
225      1010      1015      1020
226 Tyr Asp Asp Asn Asp Asn Asn Asn Val Asp Asn Asn Asn Lys Asn Asn
227 1025      1030      1035      1040
228 Val Asp Asn Asn Val Asp Asn Asn Asn Val Asp Asn Asn Val Asp Asn
229      1045      1050      1055
230 Asn Asp Lys Asn Asn Val Asp Asn Asn Asn Val Asp Asn Asp Asp Asp
231      1060      1065      1070
232 Asp Val Asp Phe His Asn Ile Lys Asn Phe Asn Asn Asn Glu Tyr Leu
233      1075      1080      1085
234 Ser Tyr Phe Gln Lys Asn Val Asp Thr Ile Ile Asn Asn Cys Leu Asn
235      1090      1095      1100
236 Ser Leu Asp Ile Ser Ser Met Tyr Asp Asp Thr Lys Glu Ile Leu Asn
237 1105      1110      1115      1120
238 Asn Ile Leu Leu Ser Lys Tyr Lys Ala Glu Lys Asp Asn Val Ile Lys
239      1125      1130      1135
240 Lys Tyr Ile Asn Glu Asp Ile Lys Asn Met Ser Leu Glu Glu Ile Asp
241      1140      1145      1150
242 Lys Thr Ala Gln Ser Ile Tyr Glu Lys Arg Lys Val Leu Leu Thr Lys
243      1155      1160      1165
244 Leu Leu Leu Leu Phe Lys Lys Asn Val Asp Thr Gln Ile Asn Asn Glu
245      1170      1175      1180
246 Thr Ser Asp Leu Arg Lys Asp Leu Val Met Cys His Ile Cys Asn Asn
247 1185      1190      1195      1200
248 Asn Pro Asp Asp Gln Phe His Phe Tyr Ala Tyr Ser Arg Leu Glu Lys
249      1205      1210      1215
250 Asp Ile Ile Asn Leu Ile Met Leu Arg Gln Ile Trp Cys Glu Ser Glu
251      1220      1225      1230
252 Asn Leu Arg Leu Leu Tyr Gln Phe Leu Val Val Glu Tyr Gln Asn Lys
253      1235      1240      1245

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/006,780

DATE: 12/14/2001

TIME: 11:08:11

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12142001\I006780.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date